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EXAMINER

KO, JASON Y

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HELMUT JERG and KAI PAINTNER

Appeal 2015-004301
Application 13/059,078
Technology Center 1700

Before TERRY J. OWENS, N. WHITNEY WILSON, and
AVELYN M. ROSS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 34–93. We have jurisdiction under 35 U.S.C. § 6(b).

The Invention

The Appellants claim a dishwasher. Claim 34 is illustrative:

34. A dishwasher, comprising:
a washing container;
an air-guiding channel to generate air flow; and
a sorption drying system to dry items to be washed,
wherein the sorption drying system has a sorption container
with reversibly dehydratable sorption material, the sorption
container connected to the washing container by the air-guiding
channel;
wherein the reversibly dehydratable sorption material in

the sorption container is one of a granular solid and a granulate having a plurality of particles as a fill with a grain size substantially between 1 mm and 6 mm; and
wherein a fill height of the plurality of particles is at least 5 times the grain size of the plurality of particles.

The References

Chu	US 5,879,764	Mar. 9, 1999
Anderson	US 2003/0000106 A1	Jan. 2, 2003
Jerg ¹	WO 2006/061293 A1	June 15, 2006

The Rejections

The claims stand rejected as follows: claims 34–58 and 62–93 under 35 U.S.C. § 103 over Jerg in view of Chu, claims 59–61 under 35 U.S.C. § 103 over Jerg in view of Chu and Anderson, and claims 34–93 provisionally on the ground of nonstatutory obviousness-type double patenting over claims 34–93 of copending application no. 13/059,237, claims 35–96 of copending application no. 13/055,945, claims 42–102 of copending application no. 13/056,131, claims 34–90 of copending application no. 13/058,881, claims 34–90 of copending application no. 13/059,074 and claims 34–93 of copending application no. 13/059,236.²

OPINION

We affirm the rejections under 35 U.S.C. § 103 and reverse the provisional obviousness-type double patenting rejections.

¹ Citations herein to Jerg are to US 2007/0295360 A1 (published Dec. 27, 2007) which the Examiner relies upon as an English language equivalent of WO 2006/061293 A1 (Final Act. 6).

² Application no. 13/055,945 issued as US 9,034,115 on May 15, 2015 and application no. 13/056,131 issued as US 8,961,705 on Feb. 24, 2015. A provisional obviousness-type double patenting rejection over claims 14–33 of application no. 13/054,572 is moot because that application stands abandoned (as of Aug. 11, 2014).

Rejections under 35 U.S.C. § 103

Jerg discloses a dishwasher (1) comprising a valve (19) for removing condensate from dish-drying air circulated through a vertical air duct (17) by a fan (9), a sorption column (10) containing zeolite beads which adsorb and store moisture remaining in the circulating air, and an electric heating element (12) which, in a subsequent washing of dishes, heats the zeolite beads such that they release the adsorbed water into the circulating air, thereby providing at least part of the heat needed to heat the dishes and/or the liquor used to rinse them (¶¶ 4, 28, 29; Fig. 1). Removing condensate in the air before the air reaches the sorption column (10) reduces the sorption column's size and space requirement (¶ 29).

Chu discloses polymer-bound water-adsorbent beads which contain at least about 10 wt% zeolite and have a preferred maximum size of at least about 0.1 mm, a preferred bulk density of about 0.6 g/ml, more preferably about 0.65–0.8 g/ml, and a preferred water adsorption capacity of at least about 3 wt% (col. 3, ll. 14–16, 22–25, 31–33, 46–47; col. 4, ll. 10–13). The beads can be used in any system wherein conventional inorganic-bound adsorbent beads are used and, when confined, can treat fluid (gas or liquid) which is actively circulated through them by a pump, fan or heater (col. 4, ll. 47–54).

The Appellants assert that Chu is nonanalogous art (App. Br. 5–7; Reply Br. 1–2). The test of whether a reference is from an analogous art is first, whether it is within the field of the inventor's endeavor, and second, if it is not, whether it is reasonably pertinent to the particular problem with which the inventor was involved. *See In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979). A reference is reasonably pertinent if, even though it may be

in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering the inventor's problem. *See In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). The Appellants assert that the problem with which they were involved is difficulty in drying a reversibly hydratable material used in dishwashers whereas the problem to which Chu is directed is reducing dust released by adsorbent beads between multiple panels in an insulating glass unit and, therefore, is not reasonably pertinent to the Appellants' problem (App. Br. 5–6).

Jerg is the first named inventor in the present application. The problem addressed by Jerg and the other inventors in the present application is lack of optimized sorption/desorption by a confined zeolite in the type of system used in the Jerg reference (Spec. ¶¶ 2–6). The Appellants solve that problem by using in the recited zeolite grain, bed and container characteristics, desorption heater wattages and zeolite temperatures, and air flow rates through the zeolite bed. Chu's disclosure is not limited to the problem relied upon by the Appellants but, rather, also pertains to use of confined adsorbent zeolite beads to treat a fluid (gas or liquid) actively circulated through the confined beads (col. 4, ll. 47–54). Hence, Chu logically would have commended itself to the Appellants' attention in considering their problem of determining how to optimize the type of system disclosed by Jerg wherein confined zeolite beads are used to adsorb water from circulating air. Chu, therefore, is analogous art.

The Appellants assert that Chu does not disclose the Appellants' recited fill height (claims 34 and 38–42), weight of sorption material

(claims 54–56), or average fill density (claims 44–48)³ (App. Br. 7–11; Reply Br. 4–5).

That assertion is deficient in that the Appellants are attacking Chu individually when the rejection is based on a combination of Jerg and Chu. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981); *In re Young*, 403 F.2d 754, 757–58 (CCPA 1968).

The Appellants assert that Jerg and Chu do not recognize or solve the problem solved by the Appellants (App. Br. 8; Reply Br. 3).

To establish a prima facie case of obviousness, references need not be combined for the purpose of solving the problem solved by the Appellants. *See In re Kemps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996); *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992); *In re Dillon*, 919 F.2d 688, 693 (Fed. Cir. 1990) (en banc); *In re Lintner*, 458 F.2d 1013, 1016 (CCPA 1972).

The Appellants assert that Jerg and Chu do not disclose the Appellants’ recited moisture quantities (claims 49–53), air flow (claim 66) or dimensions (claims 85–87) (App. Br. 11–14; Reply Br. 5–8).

Jerg discloses a dishwasher comprising a reversibly-hydratable sorption system which is similar in structure and compactness to that of the Appellants and functions the same way, i.e., removing condensate from dish-drying air circulated through a vertical air duct by a fan, storing in confined zeolite beads (Jerg’s sorption column (10); the Appellants’ sorption container (SB)) moisture remaining in the circulating air, and releasing the

³ The Appellants’ assertion that the Examiner has the burden of establishing the meaning of the Appellants’ claim term “fill density” is incorrect (App. Br. 9–10; Reply Br. 4–5). The Appellants are required by 35 U.S.C. § 112, second paragraph to provide claims having a clear meaning.

adsorbed water by heating the zeolite with an electric heater to produce heated, moist air used to heat the rinse liquor and/or dishes in a subsequent wash (Jerg, ¶¶ 4, 28, 29; Fig. 1; Spec. ¶¶ 5, 13, 15, 17, 40; Fig. 3). Jerg is silent as to the sorption system's grain size/fill height ratio, weight of sorption material, fill density, dimensions, air flow or zeolite water absorbing capability. Consequently, one of ordinary skill in the art, through no more than ordinary creativity, would have optimized those features through no more than routine experimentation. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (in making an obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ"). If one of ordinary skill in the art were unable to do so, Jerg's disclosure would be nonenabling under 35 U.S.C. § 112, first paragraph. Chu, as indicated above, provides zeolite characteristics for use by one of ordinary skill in the art as a starting point for optimizing the zeolite-related features of a sorption system such as that of Jerg in which a circulating gas is treated by confined zeolite beads. Due to the similarities in structure (compare Jerg's Fig. 1 and the Appellants' Fig. 3) and purpose (as pointed out above), there is reason to believe that optimizing Jerg's sorption system would lead to results including those obtained through the Appellants' optimization of their sorption system.

Thus, we are not persuaded of reversible error in the rejections under 35 U.S.C. § 103.

Obviousness-type double patenting rejections

The Examiner's sole rationale for the obviousness-type double patenting rejections is that "[a]lthough the claims at issue are not identical,

they are not patentably distinct from each other because they are substantially directed toward the same invention” (Final Act. 5).

That bald assertion is insufficient for establishing that the Appellants’ recited claim features would have been prima facie obvious to one of ordinary skill in the art over those recited in the relied-upon applications’ claims. Accordingly, we reverse the obviousness-type double patenting rejections.

DECISION/ORDER

The claims rejections under 35 U.S.C. § 103 of claims 34–58 and 62–93 under over Jerg in view of Chu and claims 59–61 over Jerg in view of Chu and Anderson are affirmed. The rejection of claims 34–93 provisionally on the ground of nonstatutory obviousness-type double patenting over claims 34–93 of copending application no. 13/059,237, claims 35–96 of copending application no. 13/055,945, claims 42–102 of copending application no. 13/056,131, claims 34–90 of copending application no. 13/058,881, claims 34–90 of copending application no. 13/059,074 and claims 34–93 of copending application no. 13/059,236 are reversed.

It is ordered that the Examiner’s decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED